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Toward a European regulatory scheme for the promotion of green power: ensuring energy supply, environmental protection and sustainable development[2]

Abstract

Energy policy did not reach the level of common European policy until the implementation of the Treaty of Lisbon in 2007. For this reason, energy policy measures had to be made under other auspices, such as environmental policy, trans European networks or internal markets. In this context, Directive 2001/77/EC "on the promotion of electricity produced with renewable energy" has been very important in encouraging Member States to establish national support systems compatible with internal markets. The setting of objectives, the reform of administrative procedures, the guarantee of origin of electricity, access to transportation and distribution networks and, above all, mechanisms to support green power prices have encouraged the development of renewable energies in many countries. But not equally in all countries or for all technologies, given the diversity of national systems, natural resources in each and their stage of development

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[2] Text of paper presented at the International scientific conference „International Aspects of Administrative Law", held at the Jagiellonian University, Krakow (Poland), 18 to 20 March 2011. This work has received research support from the Spanish Ministry of Science and Innovation (der2010-21 430) for the project entitled „The impact of climate change on European water policy, transportation and energy and their impact on the Spanish legal system".

Even if the required reforms are still far from being finished, the results have generally been very positive and Europe has achieved global leadership in this sector. Directive 2009/28/UE tries to give new impetus to such policy, opting for a more coordinated approach to genuine harmonization.

However, at present, there is a withdrawal of these national policies, because governments feel compelled by pressure from interest groups that use the economic crisis as an argument. This stop can disrupt the progress made and truncate the consolidation of renewable energy. Just at the point when technologies such as wind and photovoltaic solar were achieving superior levels of efficiency. In my opinion, the reasons behind this policy are still valid and recent international developments show that they should not be forgotten. Therefore, I consider that the EU should go further and establish a harmonized regulatory scheme to support renewable energy. Even more so now that the Lisbon Treaty provides a statutory basis

1. Origin and background of the renewable energy policy in the european union

The situation of renewable energy in Europe was addressed in a specific way for the first time in a Green Paper presented by the Commission in 1996, then again in 1997, in a White Paper laying down a strategy and a community action plan.

The promotion of these energy sources as a priority is justified by the fact that their chances of exploitation are underutilized because of the existence of many powerful barriers to entry. This despite the fact that they significantly contribute to the overall objectives of energy policy: security of supply, economic competitiveness and environmental sustainability. This is clean energy that does not cause pollution, (particularly greenhouse gases), and whose sources are inexhaustible and safe. Because they are not imported, they avoid dependency on external events. And in addition, it is an opportunity to create new businesses and jobs.

These collective benefits, so to speak, are not sufficient by themselves to ensure the production of green electricity and the subsequent distribution to points of consumption. As with other energy sources developed in the past, government support is deemed necessary not only in the form of direct subsidies or indirect aid.

The challenge for the Union has been, and is, that these public support systems in place by Member States in many ways function within the internal market principles, that is, competition between companies and the competitiveness of the economy.

One of the first fruits of this policy was Directive 2001/77/EC, "on the promotion of electricity produced from renewable energy sources", non-fossil energy such as wind, solar, geothermal, tidal, hydro, biomass, biogas, landfill gas, and gas purification plants.

This Directive and Directive 2003/30/EC "on the use of biofuels for transport" have been partially repealed by Directive 2009/28/EC on April 23.Also, both will be permanently repealed on January 1, 2012.

For its part, Directive 2009/28/EC is a common framework for the promotion of energy from renewable sources, including biofuels and also bio liquids, i.e. fuels produced from biomass, which are used for transportation or other different energy uses.

But, before going further, let's see the „constitutional framework" in which these regulations arose.

2. The power in the original treaties and evolution

From the legal point of view it seems right that we look first to the Treaties that such policy has developed, and then, to get the current scenario, in which the consolidation of the UE energy policy converges decisively with the fight against the warming of Earth's climate.

The original UE treaties did not recognize energy as a common policy, since States would not give up, at that time, this area of national sovereignty. Each of these treaties was to serve a limited purpose and each has different approaches. Energy policy was in the origin of the European Community, it is true, but in a partial way.

First, the Treaty of Paris of 1951 established the European Coal and Steel Community, in order to integrate the markets for these products, vital for the economic reconstruction of Europe and strategic for military defense. The ECSC tried to rationalize the exploitation and exchange of these products between member countries.

Then Treaty of Rome of 1957 created the European Atomic Energy Community and promoted cooperation for the development of this energy for peaceful purposes. This treaty tended to liberalize the market for radioactive minerals and establish the security of the facilities.

All other products (oil, gas, electricity, etc.) were subject to an overall integration scheme established by the Treaty of Rome of 1957 which established the European Economic Community.

At the level of the EEC Treaty, the ability to adopt measures on energy would not be recognized until the Treaty of Maastricht in 1992 (TEU), which established that to achieve the general goals of the EU, the action of the Union shall apply „measures in the field of energy."

By not reaching the rank of common policy within the exclusive competence, the intervention of the Union on this subject had to respect the principle of "subsidiarity". The regulation of EC has remained fragmented until now because the lack of regulatory powers.

That said, we must add that energy policy has a marked relationship with many other policies. The Treaty on the European Union highlighted two. First, the trans European networks. And second, environmental policy, which is particularly strong for renewable energy and, in particular, has legitimized the above Directives.

3. The new energy policy for europe and its consolidation in the lisbon treaty of 2007.

It should be noted that 2007 was key to the definition at the highest level of so-called New Energy Policy for Europe and, in particular for renewable energy, which was capped by the Treaty of Lisbon, amending the Treaty establishing the European Union and the Treaty establishing the European Community.

In summary, the steps that have allowed this policy were set:

- The so-called „energy package" of the Commission: five Communications Commission to the European Council and Parliament, which formed the basis for the European Council held in Brussels on March 8 and 9, 2007.
- This summit focused on energy policy and gave approval to a Plan of Action of the European Council (2007-2009) entitled „Energy Policy for Europe". The innovative approach which emerged from this summit is to integrate energy policy and climate policy, and both must walk hand in hand.

The European Council Conclusions of 2007 made the commitment to reduce CO_2 emissions in 2020 by 20%, potentially reaching 30% (returning to the level of concentration of CO_2 of 1990) if it is assumed by the other industrialized countries.

On the other hand, the 2007-2009 Action Plan presents a broad package of measures including the completion of binding targets for 2020 of 20% use of renewable energies in total energy consumption and 10% biofuel in transportation.

For its part, in a resolution of September 25, 2007 the European Parliament asked the Commission to submit a proposal for a legal framework for the renewable energy sector. Most of these ideas and proposals are reflected ultimately in Directive 2009/28/EC of April 23, promoting the use of energy from renewable sources.

This process has its culmination in the Treaty of Lisbon in 2007, which includes a new and specific chapter for energy policy:

- Fist, it introduces energy as a shared-competence between the Union and States. Energy gets the same range as agriculture, fisheries, transport, among others.
- This policy is framed by the internal market, environmental protection and solidarity among Member States.
- The objectives will be the functioning of an internal market for energy, ensuring security of energy supplies, encouraging efficiency, savings and development of new and renewable energies, and the interconnection of energy networks.
- Measures to achieve these objectives will be taken by the ordinary legislative procedure, i.e. by the Parliament and the Council, after consulting the Economic and Social Committee and the Committee of the Regions.

The new treaty respects the right of each Member State to decide the conditions for exploiting its energy resources, choosing between the different sources and the overall structure of supply.

However, the Council may take action affecting the rights of States, in particular when they are of a fiscal nature, while acting unanimously after consulting the Parliament.

This is especially to deal with supply problems, in a spirit of solidarity between European countries.

We conclude that the Lisbon Treaty has given the desired status of shared and common policy to energy. Its premises, goals and qualifications condense the "acquis" over many years in the shadow of other policies. So, the promotion of renewable energies becomes a European target of the highest rank.

4. Analysis of 2001 and 2009 directives on green power

a) Objectives: promotion of renewable energy and a future Community framework

Directive 2001/77/EC aims mainly to encourage the production of electricity from renewable non-fossil energy. And as a long term goal, it also aims to lay the groundwork for a future Community framework for systems to support green electricity.

This Directive points out five specific means, namely:

- Setting national indicative targets (Article 3),
- Evaluation of support systems (art. 4),
- The establishment of guarantees of origin of green electricity (Article 5)
- Simplification and streamlining of administrative procedures (Article 6)
- The producers' access to transportation and distribution of energy networks (Article 7).

Besides influencing these aspects, Directive 2009/28/EC introduces new definitions and other regulatory elements, such as rules on transfer statistics between Member States, the possibility of joint projects between them and also with third countries, the public information and training of professionals, in addition to defining sustainability criteria for biofuels and bio liquids which benefit from support measures.

b) National targets: from indicative to binding

A first step envisaged by the 2001 Directive was to establish the objective that 22'1% of European electricity consumption could be served by renewable sources by 2010, although this was reduced to 21% when it came to the EU enlargement of Twenty-five.

Also each country would mark a national indicative target. In particular, for Spain the RES-E target set for 2010 was 29'4%, taking into account that in 1997 the share of green electricity in total gross consumption was 19.9%.

Within the new Directive 2009/28/EC, these indicative targets are replaced with binding targets, designed to reassure investors and promote the continued development of renewable technologies.

In particular, the EU target of 20% translates into individual goals for States, through an equitable allocation that takes into account the starting points with reference to 2005. For Spain this binding target is set at 20%.

Instead, it sets the same target of 10% renewable energy (and not just biofuel) in transport for all Member States alike.

c) Systems to support green electricity

In relation to public aid for green electricity, the Union is faced with a dilemma. It is clear that different countries have applied different support mechanisms to these energies, such as green certificates, investment aid, tax rebates or exemptions and direct price support. These measures differ according to national security priorities of supply, local employment, reduced emissions and technology support, based in turn on their financial situation, development status and other circumstances.

Most of them, including Spain, have established a guaranteed price system by fixing a special price for green electricity producers and requiring network operators to buy the power supply. The price is usually guaranteed for a lengthy period of time to encourage investment in new production plants. Remuneration rates act on the offer and promote the entry of green electricity in the market.

But we cannot ignore that the direct or indirect subsidies received by producers of green electricity could be illegal if they are considered State aid incompatible with the common market (art. 87 and 88 TEC), or restrictive trade measures (art. 28 TEC).

However, the Court of Justice of the European Community has no objection on that basis.

A good example is the case "PreussenElektra „, on the validity of the German regulations imposed on the suppliers and distributors forced to buy electricity generated by renewable energy facilities at a political price (ECJ judgment in 13 March 2001 (C-379/1998).

The ECJ is aware that national rules are intended to encourage the use of renewable energy and reduce emissions of gases that cause the climate change that the Union and Member States have set out to combat. Also under the Treaties, environmental policy must be integrated into the definition and implementation of other Community policies. And finally, it is the Directive on the internal electricity market that, in response to those grounds is authorized to give priority to such energy.

It is easy to predict that the Union sooner or later will have to regulate national support schemes, to adapt to the internal electricity market. But in the meantime, it is important to ensure the proper functioning of these mechanisms, in order to maintain investor confidence and not to compromise the fundamental objective of the Directive.

In spite of its title, Directive 2009/28/EC does not become the framework of national support schemes, since it is a mandate to the Commission by 2011 to submit a plan to improve funding using Structural Funds, the framework programs, funds from the European Investment Bank and other public financial institutions (art. 23.7).

The new Directive reaffirms, of course, the need to maintain public support systems to achieve the expansion of green power as electricity prices do not reflect all the costs and environmental and social benefits of the sources used.

d) Guarantee of origin of green electricity

Directive 2001/77/EC ordered the Member States to create systems to guarantee the origin of green electricity that would allow producers to demonstrate this fact, with the dual aim of facilitating trade in electricity and providing transparency to the election of consumers (art. 5).

Thus, public campaigns and traders may boost demand for green electricity consumers, which in turn encourages investment in these technologies and production capacity.

Following the Directive, Member States should ensure that the guarantee of origin is accurate and reliable, indicating the specific source, date and place, with objectiveness, transparency and non-discrimination. They also have to designate which body independent of the generation and distribution activities will oversee the issuance of guarantees.

The need to regulate these guarantees in Spain was revealed in an interesting report by the National Energy Commission of 23 March, 2004. It recommended the speedy implementation of the Directive to prevent the marketing of „green certificates" by certain companies through strong misleading advertising campaigns.

In Spain, the guarantee of origin of electricity from renewable energy sources has finally been approved by Ministerial Order of 24 May 2007.

Guarantees of origin covered by Directive 2009/28/EC also have the function of showing the consumer that a certain amount of energy was produced from renewable sources. While they can be transferred from one producer to another, they can't be counted twice, making States accountable for overseeing the issuance, transfers and cancellations of these guarantees of origin, which may only be used within twelve months after production, and in no case, after being used (art. 15).

f) Administrative procedures

The regulatory and administrative framework of the electricity sector existing in the different European countries has been determined by an industrial structure based on a small number of large plants. Spain is a good example of this. Administrations are used to contending with a few very powerful companies. However, renewable energy facilities are smaller, dispersed and growing in number; hence the approval procedures and requirements can be a barrier to those promoting the construction of these facilities, especially for small and medium enterprises.

Indeed, time, personnel, expenses of the paperwork necessary to obtain administrative permissions are factors that influence the economic viability of new power plants. It can frustrate these projects directly, when imposing requirements that are only available to large companies and discouraging beginning entrepreneurs. Or when the Administration reserves a discretionary power to grant licenses on the basis of criteria impossible to verify and monitor. This causes mistrust and insecurity among the entrepreneurs not linked to the corridors of government.

Hence, the Directive 2001/77/EC postulated an adaptation of the rules and procedures, believing that the simplification and speed would encourage investment in renewable energy plants.

The Directive called on Member States to assess the procedures and requirements necessary to authorize the construction and operation of plants producing green electricity, with the aim of reducing barriers, simplifying and streamlining processing. They should also ensure that all rules are fair, objective and transparent.

Nine years later, the Directive 2009/28/EC notes that the lack of transparency and coordination between different authorization agencies is hindering the development of renewable energies. Hence, it requires, once again, that the authorities take into account the peculiarities of this sector and review the licensing procedures for construction and operation of green electricity plants.

It insists, therefore, in the rationalization and simplification of administrative procedures and the transparency of the schedule. New is the possibility of replacing the authorization by a simple notice to the authority, when it comes to smaller facilities (art. 13).

g) Grid system issues

Green electricity is often produced in small dispersed facilities such as small hydroelectric, solar or wind farms. To build broadly to transfer from each of these sources to consumption centers is impractical for economic, technical and environmental reasons, among others.

It is essential therefore that they can connect to existing networks with feasible technical conditions at a reasonable cost.

In this regard, the Directive provides that Member States establish regulations or take steps to require operators of transportation and distribution systems as follows:

1. To ensure the transportation and distribution of green electricity by establishing, where appropriate, priority access to the grid system, to the extent that the functioning of the national electricity system permits.
2. To establish and publish standard rules relating to the costs of technical adaptations, such as grid connections and reinforcements that are necessary for integration into the interconnected network of a new producer of green electricity. Where appropriate, States could require operators to take on all or part of these costs
3. To develop and publish rules governing the distribution of the costs of the facilities of the system between all producers benefiting from them.
4. To facilitate the new producer with a comprehensive and detailed estimate of the costs of connecting to the network, allowing producers to tender the connection work.
5. The tolls for transportation and distribution cannot discriminate against green electricity, especially if it is produced in peripheral regions and sparsely populated areas. Therefore, the standard rules on switching costs and cost sharing must be based on objective, transparent and non discriminatory criteria and take into account all costs and benefits associated with the connection of these producers.

Directive 2009/28/EC maintains the importance of priority access and guarantees for the integration of renewable energy in the internal electricity market, so they can sell the green electricity produced at all times.

Moreover, States have to develop the transport and distribution infrastructure, intelligent networks, storage devices, interconnections between states and the whole system to allow greater penetration of green electricity. They must also accelerate the process of connecting to the networks of new production facilities and, together with the recognition of priority, may provide reserve capacity for the same connection.

More fundamentally, included in the new Directive, remains the assurance that operators of transmission and distribution systems comply with these rules, minimizing restrictions on green electricity. Hence the duty to strengthen the demand on them by the Member States, reaffirming the duty to provide information and publicity of the rules on allocation of costs of technical adaptations, connection and reinforcement of networks for newcomers, reasonable and precise timetables for receiving and processing applications, non-discriminatory tariffs and reflection of associated benefits, etc. (Art. 16).

5. Evaluation of results

Official reports of the European Commission, the Economic and Social Committee and other community institutions to assess the implementation of RES-E Directive issued in 2005 and 2006 have evaluated the progress achieved and the possibility of achieving by 2010 the target for the share of renewable energy reaching 10–12% in total energy consumption in Europe, which refers to green electricity of 19–21%.

The reports note that all Member States have set national targets and have developed policies to improve the legal and financial conditions for renewable energy.

However, the situation varies greatly from one country to another. They can be divided into three groups:

- In the group of countries that have adopted measures so that they may achieve the national objectives is Spain, with Germany, Denmark and Finland.
- In the rest of Europe, the situation would not be so optimistic, because existing measures, the EU-15 would get a share of between 18 and 19% in 2010.
- Most (France, UK, etc.) have begun to take steps in that direction. Greece and Portugal still have to improve their policies, which preclude them from achieving those objectives.
- About Italy and Luxembourg the reports acknowledge that no information is available. Our information is that the Commission, for these reasons, has launched infringement proceedings against six Member States.

Visiting the different renewable energy sources, the reports trust especially in the development of technologies using wind, solar and biomass. And they stress the wind, where European companies have 90% of the world equipment market and Germany, Spain and Denmark account for 84% of all European production capacity. In fact, that wind power is exceeding expectations and is expected to grow in more member countries and the emergence of new plants offshore.

The Commission proposes strengthening network infrastructure as necessary for continued development of these facilities and taking advantage of its great potential.

The use of biomass, however, suffers from lack of coordination with other policies and lack of financial support, although Denmark, Finland and the UK experienced strong growth of this energy source and new countries have significant potential to generate electricity and heat with it.

Photovoltaic power, in the short term, may experience significant development if it creates a framework that provides companies a return on their investment.

In Spain, the official statistics of the Ministry of Industry show that in 2010 the target of wind energy plants (99% of 20.155 MW) was reached, while they were ahead of the plans related to PV (292% about 1.331 MW) and solar thermal (106% above 500 MW). The rest (cogeneration, biomass, municipal waste, etc.) have had remarkable results.

6. The effects of the economic crisis and conclusions

To address the double crisis, energy and finance, the European Commission in late 2008 presented „An economic recovery plan" in which the European energy program was a key element.

As a more tangible in this area, Regulation (EC) No 663/2009, of the Parliament and the Council of 13 July 2009 can be cited, establishing a program to assist economic recovery by the granting of Union financial assistance to projects in the field of energy, amounting to 3,980 million euro. Especially for the creation of infrastructure facilities (2,356), production of energy from offshore wind (565) and carbon capture and storage (1,050).

It is, in our view, a positive step, but clearly not enough.

We can see that the economic crisis is causing a rethinking of national systems for the promotion of renewable energy, which in turn calls into question the continuity of European energy policy, with such recent design.

Thus, France prepared a substantial aid system cut and, in particular, halving the 50% tax deduction to be enjoyed by domestic photovoltaic installations.

For its part, Germany decided to extend the life of nuclear power plants between 14 and 18 years. Although it was criticized by opponents of nuclear energy, this measure was presented by the Government to guarantee the electricity supply, reduce CO_2 emissions and facilitate the development of renewable energy, thanks to new tax on atomic components and payments to be made to promote renewable energy.

But I am not going to talk about other countries. This shift is especially notable in Spain. With the Act 54/1997 "on the Electricity Sector", our country has followed a successful policy of encouraging such alternative sources that consists, in short, of ensuring the acquisition of all energy produced and paying a remuneration fee that ensures a return on investment and a reasonable profit. No provisions for limits on the expansion of these facilities (photovoltaic gardens, wind farms, cogeneration plants, etc.) were established. It has allowed an increasing development of the same, attracting heavy investments by large companies and small investors, including foreign capital, which in turn facilitated the technological research and development of industry equipment, construction and maintenance more efficient in both cost savings and productivity.

But the continuity of this is seriously threatened because of new rules passed by the Government at the end of 2010 (Real Decreto 1565/2010, of 19 November, Real Decreto 1614/2010 of 7 December and Real Decreto-Ley 14/2010, of 23 December). This new law reduces the remuneration rate that these facilities enjoyed, with the argument that poses a high burden on the entire electrical system and, ultimately, the prices paid by consumers, whether domestic, transport, industry, farmers, etc. which hinders the competitiveness of our economy to get out of the economic crisis.

This is undoubtedly a very sensitive debate, which is causing the cessation of new investment projects in the sector and is thus reducing production equipment, assembly activities, scientific and technological research and so eliminating the progress in lower costs and greater efficiency. In addition, it is deepening the economic crisis and unemployment.

It is obviously a very complex debate. There are reasons of substantive justice that can assist those who have risked their money contributing to government policy and now they have been defrauded and ruined. From a strictly legal point of view, it is no exaggeration to say that the new rules violate the principles of legal certainty, good faith and legitimate expectations, and Directives on the promotion of renewable energy.

Prices, tariffs, tolls and, in general, the operation of the electricity market is far from transparent and competitive in Spain. An oligopoly of large companies dominates the pricing system, and the daily electricity market gives the highest marginal reward obtained by auction to all energy gained, regardless of the tremendous disparity in costs between, for example, a thermoelectric power plant and a hydroelectric plant.

However the Directives on the internal electricity market imposed the juridical and accounting separation, the vertical integration model in the companies of this sector still continues by creating subsidiary companies, who obey the same business strategy. This is another factor that adds opacity and makes the entry of new independent competitors difficult. These holding companies operate both in the market of ordinary generation (nuclear, hydro, etc.) and renewable sources. Because they are the owners of the grid systems, they control the access to distribution networks of new producers. These are just some examples that deserve a case study analysis.

Hence, as a first conclusion, we should advocate a real and effective application of European legislation, contributing to put light, transparency and objectivity to a national debate clouded by corporate interests, the economic situation and the search of short-term solutions. We have to solve the urgency, but without risking what is more important: establishing a sustainable economy.

The unexpected recent events in northern Africa should remind us that Europe remains highly exposed to the energy crisis. The sunami of Japan remind us the risk of nuclear power. Nor can we forget our commitments with the international community (United Nations Framework Convention on Climate Change, adopted in New York in 1992, and the Kyoto Protocol of 1997).

Along with this, it may be time to move seriously towards the harmonization of national support systems for renewable energies.

So far the EU has held that, although desirable, harmonization of national systems to support green electricity cannot be established because the public systems are varied and different from one country to another.

Hence, postponing the decision leads to the long term and that, until now, the EU has been limited to sponsoring national systems, trying to coordinate, analyze their shortcomings

and stimulate the necessary changes to be introduced. At best, it has come to fund research and pilot projects, certain transportation network infrastructure identified as priorities and, where appropriate, establish common technical standards on safety and interoperability.

However, national and European support is not sufficient to ensure the consolidation of renewable energy. As we have seen, the systems often serve local factors such as the abundance of some natural and other resources. Economic situations and changing policies can induce growth-restricting phenomena that create risk for investors and stop the progress achieved.

The truth is that renewable energy technologies still require support in order to break into the current energy market, emerging industry and creating new businesses and jobs, helping to ensure supply in Europe and meet their reduction commitments on climate change. However, the excessive price of electricity may become a burden for consumers and industries in those countries that decided to make a bet for them, threatening their competitiveness and employment, while others may take a more passive role looking for an advantageous position, which ultimately will be a drag on economic growth sustainable in Europe.

We agree that the support mechanisms should not be kept indefinitely and should even be removed for those technologies that do not need them. The creation of fictitious jobs, which disappear at the end of subsidies, is another risk to avoid.

But Directive 2001/77/EC, by allowing States to organize support measures has allowed the inconsistencies and distortions of markets, loss of synergies, lack of incentives and marketing channels, and unnecessarily high costs. Directive 2009/28/EC does not provide radically different solutions to address these problems.

This could be overcome by adopting a common European approach. With more reason now that the Lisbon Treaty has raised energy policy to the category of common policy and the promotion of renewable energy is one of its cardinal objectives. Hence, as a final conclusion, we should advocate the establishment of a European scheme to give stable support to this sector.

As pointed out by some scientists, the fossil fuel age will not end short-term depletion of oil, natural gas and coal, whose proven reserves can last as little 60, 120 and 1,500 years respectively. In the same way the Stone Age did not end for lack of stones, breaking the current energy model can only come from a technological change based on the use of renewable energy.

This change is at hand, because there is scientific basis that allows it. So what is needed is to persevere in a European public policy that promotes the virtuous cycle that moves the wheels of subsequent applied research, technological development, investment in facilities, production and sale of energy, demand for new goods equipment, machinery, improved means of operation, greater knowledge of management, all of which, with consequent economies of scale, contribute to reducing costs, increasing economic efficiency and competitiveness of renewable energies within the internal market.

Our final conclusion is the value of a European wide regulation to correct the reported national deviations, ensure an equitable distribution of benefits and burdens and give a new impulse to the wheels of progress.

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